NCBI PubMed National Library of Medicine NLM

PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM Book

Search PubMed for tenebrio protein hysteresis Go Clear

Limits Preview/Index History Clipboard Details

Display Summary Sort Save Text Clip Add Order

Show: 20 Items 1-9 of 9 One page.

Entrez PubMed

PubMed Services

Related Resources

1: Marshall C, Daley M, Graham L, Sykes B, Davies P. Related Articles, Links

Identification of the ice-binding face of antifreeze protein from Tenebrio molitor.
FEBS Lett. 2002 Oct 9;529(2-3):261.
PMID: 12372611 [PubMed - in process]

2: Graham LA, Walker VK, Davies PL. Related Articles, Links

Developmental and environmental regulation of antifreeze proteins in the mealworm beetle Tenebrio molitor.
Eur J Biochem. 2000 Nov;267(21):6452-8.
PMID: 11029589 [PubMed - indexed for MEDLINE]

3: Liou YC, Daley ME, Graham LA, Kay CM, Walker VK, Sykes BD, Davies PL. Related Articles, Links

Folding and structural characterization of highly disulfide-bonded beetle antifreeze protein produced in bacteria.
Protein Expr Purif. 2000 Jun;19(1):148-57.
PMID: 10833402 [PubMed - indexed for MEDLINE]

4: Liou YC, Thibault P, Walker VK, Davies PL, Graham LA. Related Articles, Links

A complex family of highly heterogeneous and internally repetitive hyperactive antifreeze proteins from the beetle Tenebrio molitor.
Biochemistry. 1999 Aug 31;38(35):11415-24.
PMID: 10471292 [PubMed - indexed for MEDLINE]

5: Graham LA, Bendena WG, Walker VK. Related Articles, Links

Cloning and baculovirus expression of a desiccation stress gene from the beetle, Tenebrio molitor.
Insect Biochem Mol Biol. 1996 Feb;26(2):127-33.
PMID: 8882655 [PubMed - indexed for MEDLINE]

6: Wilson PW, Leader JP. Related Articles, Links

Stabilization of supercooled fluids by thermal hysteresis proteins.
Biophys J. 1995 May;68(5):2098-107.
PMID: 7612853 [PubMed - indexed for MEDLINE]

7: Hansen TN, Baust JG. Related Articles, Links

Differential scanning calorimetric analysis of antifreeze protein activity in the

common mealworm, Tenebrio molitor.
Biochim Biophys Acta. 1988 Nov 23;957(2):217-21.
PMID: 3191140 [PubMed - indexed for MEDLINE]

8: Burcham TS, Osuga DT, Yeh Y, Feeney RE. Related Articles, Links

A kinetic description of antifreeze glycoprotein activity.
J Biol Chem. 1986 May 15;261(14):6390-7.
PMID: 3700396 [PubMed - indexed for MEDLINE]

9: Tomchaney AP, Morris JP, Kang SH, Duman JG. Related Articles, Links

Purification, composition, and physical properties of a thermal hysteresis "antifreeze" protein from larvae of the beetle, Tenebrio molitor.
Biochemistry. 1982 Feb 16;21(4):716-21.
PMID: 7074035 [PubMed - indexed for MEDLINE]

Display Summary Sort Save Text Clip Add Order

Show: 20 Items 1-9 of 9 One page.

Write to the Help Desk
NCBI | NLM | NIH
Department of Health & Human Services
Freedom of Information Act | Disclaimer

Welcome to STN International! Enter x:x

LOGINID:ssspta1652dmr

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 27	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28	Oct 21	EVENTLINE has been reloaded
NEWS 29	Oct 24	BEILSTEIN adds new search fields
NEWS 30	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 31	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS 32	Nov 18	DKILIT has been renamed APOLLIT
NEWS 33	Nov 25	More calculated properties added to REGISTRY

NEWS EXPRESS	October 14 CURRENT WINDOWS VERSION IS V6.01, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

=> d his

(FILE 'HOME' ENTERED AT 17:20:20 ON 25 NOV 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 17:20:33 ON 25 NOV 2002

SEA HYSTERE? AND (PROTEI? OR POLYPEPTID?)

29 FILE ADISALERTS
14 FILE ADISINSIGHT
6 FILE ADISNEWS
81 FILE AGRICOLA
27 FILE AQUASCI
29 FILE BIOBUSINESS
1 FILE BIOCOMMERCE
803 FILE BIOSIS
23 FILE BIOTECHABS
23 FILE BIOTECHDS
342 FILE BIOTECHNO
177 FILE CABA
291 FILE CANCERLIT
930 FILE CAPLUS
14 FILE CEABA-VTB
4 FILE CEN
3 FILE CIN
6 FILE CONFSCI
8 FILE DDFB
137 FILE DDFU
160 FILE DGENE
8 FILE DRUGB
338 FILE DRUGU
1 FILE DRUGUPDATES
7 FILE EMBAL
905 FILE EMBASE
331 FILE ESBIOBASE
19 FILE FEDRIP
32 FILE FROSTI
67 FILE FSTA
23 FILE GENBANK
28 FILE IFIPAT
265 FILE JICST-EPLUS
1 FILE KOSMET
124 FILE LIFESCI
957 FILE MEDLINE
2 FILE NIOSHTIC
4 FILE NTIS
6 FILE OCEAN
350 FILE PASCAL
1 FILE PHARMAML
6 FILE PHIN
40 FILE PROMT
824 FILE SCISEARCH
174 FILE TOXCENTER
963 FILE USPATFULL
16 FILE USPAT2
33 FILE VETU
28 FILE WPIDS
28 FILE WPINDEX
6 FILE IPA
1 FILE NAPRALERT
38 FILE NLDB

L1 QUE HYSTERE? AND (PROTEI? OR POLYPEPTID?)

FILE 'USPATFULL, MEDLINE, CAPLUS, EMBASE, SCISEARCH, BIOSIS, PASCAL, BIOTECHNO, DRUGU, ESBIOBASE, CANCERLIT, JICST-EPLUS, CABA, TOXCENTER,

DGENE, LIFESCI, AGRICOLA, FSTA, PROMT, NLDB, VETU, FROSTI, ADISALERTS, BIOBUSINESS, IFIPAT, WPIDS' ENTERED AT 17:22:50 ON 25 NOV 2002

L2 8339 S HYSTERE? AND (PROTEI? OR POLYPEPTID?)
L3 1013 S L2 AND ANTIFREE?
L4 192 S L3 AND TENEB?
L5 322 S L3 AND INSEC?
L6 141 DUP REM L5 (181 DUPLICATES REMOVED)
L7 111 S L4 AND (RECOMBIN? OR ISOLAT? OR CLON?)
L8 55 S L6 AND (RECOMBINA? OR ISOLAT? OR CLON?)
L9 88 DUP REM L7 (23 DUPLICATES REMOVED)
L10 36 S L8 NOT L9

```
  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *



FILE 'HOME' ENTERED AT 17:20:20 ON 25 NOV 2002

=> index bioscience medicine
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
       BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
       CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
       DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...'
ENTERED AT 17:20:33 ON 25 NOV 2002

67 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s hystere? and (protei? or polypeptid?)
         29   FILE ADISALERTS
         14   FILE ADISINSIGHT
          6   FILE ADISNEWS
         81   FILE AGRICOLA
         27   FILE AQUASCI
         29   FILE BIOBUSINESS
          1   FILE BIOCOMMERCE
        803   FILE BIOSIS
         23   FILE BIOTECHABS
         23   FILE BIOTECHDS
        342   FILE BIOTECHNO
        177   FILE CABA
        291   FILE CANCERLIT
  14 FILES SEARCHED...
        930   FILE CAPLUS
         14   FILE CEABA-VTB
          4   FILE CEN
          3   FILE CIN
          6   FILE CONFSCI
          8   FILE DDFB
        137   FILE DDFU
        160   FILE DGENE
          8   FILE DRUGB
  26 FILES SEARCHED...
        338   FILE DRUGU
          1   FILE DRUGUPDATES
          7   FILE EMBAL
        905   FILE EMBASE
        331   FILE ESBIOBASE
         19   FILE FEDRIP
         32   FILE FROSTI
  37 FILES SEARCHED...
         67   FILE FSTA
         23   FILE GENBANK
         28   FILE IFIPAT
        265   FILE JICST-EPLUS
          1   FILE KOSMET
        124   FILE LIFESCI
        957   FILE MEDLINE
```

```
          2   FILE NIOSHTIC
          4   FILE NTIS
          6   FILE OCEAN
        350   FILE PASCAL
  50 FILES SEARCHED...
          1   FILE PHARMAML
          6   FILE PHIN
         40   FILE PROMT
        824   FILE SCISEARCH
        174   FILE TOXCENTER
        963   FILE USPATFULL
         16   FILE USPAT2
         33   FILE VETU
         28   FILE WPIDS
         28   FILE WPINDEX
          6   FILE IPA
          1   FILE NAPRALERT
         38   FILE NLDB

  53 FILES HAVE ONE OR MORE ANSWERS,   67 FILES SEARCHED IN STNINDEX

L1   QUE HYSTERE? AND (PROTEI? OR POLYPEPTID?)

=> d rank
F1          963   USPATFULL
F2          957   MEDLINE
F3          930   CAPLUS
F4          905   EMBASE
F5          824   SCISEARCH
F6          803   BIOSIS
F7          350   PASCAL
F8          342   BIOTECHNO
F9          338   DRUGU
F10         331   ESBIOBASE
F11         291   CANCERLIT
F12         265   JICST-EPLUS
F13         177   CABA
F14         174   TOXCENTER
F15         160   DGENE
F16         137   DDFU
F17         124   LIFESCI
F18          81   AGRICOLA
F19          67   FSTA
F20          40   PROMT
F21          38   NLDB
F22          33   VETU
F23          32   FROSTI
F24          29   ADISALERTS
F25          29   BIOBUSINESS
F26          28   IFIPAT
F27          28   WPIDS
F28          28   WPINDEX
F29          27   AQUASCI
F30          23   BIOTECHABS
F31          23   BIOTECHDS
F32          23   GENBANK
F33          19   FEDRIP
F34          16   USPAT2
F35          14   ADISINSIGHT
F36          14   CEABA-VTB
F37           8   DDFB
F38           8   DRUGB
F39           7   EMBAL
F40           6   ADISNEWS
F41           6   CONFSCI
```

```
F42             6   OCEAN
F43             6   PHIN
F44             6   IPA
F45             4   CEN
F46             4   NTIS
F47             3   CIN
F48             2   NIOSHTIC
F49             1   BIOCOMMERCE
F50             1   DRUGUPDATES
F51             1   KOSMET
F52             1   PHARMAML
F53             1   NAPRALERT


=> file f1-f28
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.12       2.33

FILE 'USPATFULL' ENTERED AT 17:22:50 ON 25 NOV 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 17:22:50 ON 25 NOV 2002

FILE 'CAPLUS' ENTERED AT 17:22:50 ON 25 NOV 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Elsevier Science B.V.  All rights reserved.

FILE 'SCISEARCH' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Institute for Scientific Information (ISI) (R)

FILE 'BIOSIS' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'PASCAL' ENTERED AT 17:22:50 ON 25 NOV 2002
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2002 INIST-CNRS. All rights reserved.

FILE 'BIOTECHNO' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'DRUGU' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'ESBIOBASE' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CANCERLIT' ENTERED AT 17:22:50 ON 25 NOV 2002

FILE 'JICST-EPLUS' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Japan Science and Technology Corporation (JST)

FILE 'CABA' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 CAB INTERNATIONAL (CABI)

FILE 'TOXCENTER' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 ACS

FILE 'DGENE' ENTERED AT 17:22:50 ON 25 NOV 2002
```

```
COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'DDFU' ACCESS NOT AUTHORIZED

FILE 'LIFESCI' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)


FILE 'AGRICOLA' ENTERED AT 17:22:50 ON 25 NOV 2002

FILE 'FSTA' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 International Food Information Service

FILE 'PROMT' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Gale Group. All rights reserved.

FILE 'NLDB' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Gale Group. All rights reserved.

FILE 'VETU' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'FROSTI' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Leatherhead Food Research Association

FILE 'ADISALERTS' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Adis International Ltd. (ADIS)

FILE 'BIOBUSINESS' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 Biological Abstracts, Inc. (BIOSIS)

FILE 'IFIPAT' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 IFI CLAIMS(R) Patent Services (IFI)

FILE 'WPIDS' ENTERED AT 17:22:50 ON 25 NOV 2002
COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> s hystere? and (protei? or polypeptid?)
   7 FILES SEARCHED...
  11 FILES SEARCHED...
  15 FILES SEARCHED...
L2        8339 HYSTERE? AND (PROTEI? OR POLYPEPTID?)

=> s l2 and antifree?
L3        1013 L2 AND ANTIFREE?

=> s l3 and teneb?
L4         192 L3 AND TENEB?

=> dup rem
ENTER L# LIST OR (END):'l4
'L4 IS NOT VALID HERE
The L-number entered has not been defined in this session, or it
has been deleted.  To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l3 and insec?
L5         322 L3 AND INSEC?

=> dup rem l5
DUPLICATE IS NOT AVAILABLE IN 'DGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L5
```

```
L6          141 DUP REM L5 (181 DUPLICATES REMOVED)

=> s l4 and (recombin? or isolat? or clon?)
   7 FILES SEARCHED...
  14 FILES SEARCHED...
L7          111 L4 AND (RECOMBIN? OR ISOLAT? OR CLON?)

=> s l6 and (recombina? or isolat? or clon?)
   7 FILES SEARCHED...
  14 FILES SEARCHED...
  24 FILES SEARCHED...
L8           55 L6 AND (RECOMBINA? OR ISOLAT? OR CLON?)

=> dup rem l7
DUPLICATE IS NOT AVAILABLE IN 'DGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L7
L9           88 DUP REM L7 (23 DUPLICATES REMOVED)

=> d his

     (FILE 'HOME' ENTERED AT 17:20:20 ON 25 NOV 2002)

     INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
     DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 17:20:33 ON
     25 NOV 2002
               SEA HYSTERE? AND (PROTEI? OR POLYPEPTID?)
              ---------
             29   FILE ADISALERTS
             14   FILE ADISINSIGHT
              6   FILE ADISNEWS
             81   FILE AGRICOLA
             27   FILE AQUASCI
             29   FILE BIOBUSINESS
              1   FILE BIOCOMMERCE
            803   FILE BIOSIS
             23   FILE BIOTECHABS
             23   FILE BIOTECHDS
            342   FILE BIOTECHNO
            177   FILE CABA
            291   FILE CANCERLIT
            930   FILE CAPLUS
             14   FILE CEABA-VTB
              4   FILE CEN
              3   FILE CIN
              6   FILE CONFSCI
              8   FILE DDFB
            137   FILE DDFU
            160   FILE DGENE
              8   FILE DRUGB
            338   FILE DRUGU
              1   FILE DRUGUPDATES
              7   FILE EMBAL
            905   FILE EMBASE
            331   FILE ESBIOBASE
             19   FILE FEDRIP
             32   FILE FROSTI
             67   FILE FSTA
             23   FILE GENBANK
             28   FILE IFIPAT
            265   FILE JICST-EPLUS
              1   FILE KOSMET
            124   FILE LIFESCI
```

```
                957   FILE MEDLINE
                  2   FILE NIOSHTIC
                  4   FILE NTIS
                  6   FILE OCEAN
                350   FILE PASCAL
                  1   FILE PHARMAML
                  6   FILE PHIN
                 40   FILE PROMT
                824   FILE SCISEARCH
                174   FILE TOXCENTER
                963   FILE USPATFULL
                 16   FILE USPAT2
                 33   FILE VETU
                 28   FILE WPIDS
                 28   FILE WPINDEX
                  6   FILE IPA
                  1   FILE NAPRALERT
                 38   FILE NLDB
L1                QUE HYSTERE? AND (PROTEI? OR POLYPEPTID?)
                  ---------

     FILE 'USPATFULL, MEDLINE, CAPLUS, EMBASE, SCISEARCH, BIOSIS, PASCAL,
     BIOTECHNO, DRUGU, ESBIOBASE, CANCERLIT, JICST-EPLUS, CABA, TOXCENTER,
     DGENE, LIFESCI, AGRICOLA, FSTA, PROMT, NLDB, VETU, FROSTI, ADISALERTS,
     BIOBUSINESS, IFIPAT, WPIDS' ENTERED AT 17:22:50 ON 25 NOV 2002
L2          8339 S HYSTERE? AND (PROTEI? OR POLYPEPTID?)
L3          1013 S L2 AND ANTIFREE?
L4           192 S L3 AND TENEB?
L5           322 S L3 AND INSEC?
L6           141 DUP REM L5 (181 DUPLICATES REMOVED)
L7           111 S L4 AND (RECOMBIN? OR ISOLAT? OR CLON?)
L8            55 S L6 AND (RECOMBINA? OR ISOLAT? OR CLON?)
L9            88 DUP REM L7 (23 DUPLICATES REMOVED)

=> s l8 not l9
  22 FILES SEARCHED...
L10           36 L8 NOT L9

=> d ti l10 1-36

L10  ANSWER 1 OF 36  USPATFULL
TI     Sculpin-type antifreeze polypeptides and nucleic
       acids

L10  ANSWER 2 OF 36  USPATFULL
TI     Extending tissue preservation

L10  ANSWER 3 OF 36  USPATFULL
TI     Prevention of ice nucleation by polyglycerol

L10  ANSWER 4 OF 36  USPATFULL
TI     Cryopreservation method using cryoprotective composition of propanediol
       and a vehicle solution

L10  ANSWER 5 OF 36  USPATFULL
TI     Non-food crop plant bioreactor

L10  ANSWER 6 OF 36  USPATFULL
TI     EXTENDING TISSUE PRESERVATION

L10  ANSWER 7 OF 36  USPATFULL
TI     FROZEN FOOD PRODUCT

L10  ANSWER 8 OF 36  USPATFULL
TI     Intracellular antifreeze polypeptides and nucleic
```

acids

L10 ANSWER 9 OF 36 USPATFULL
TI Process for preparing novel ice-controlling molecules

L10 ANSWER 10 OF 36 USPATFULL
TI Frozen food product

L10 ANSWER 11 OF 36 USPATFULL
TI Frozen food product

L10 ANSWER 12 OF 36 USPATFULL
TI Frozen food product

L10 ANSWER 13 OF 36 USPATFULL
TI Frozen food product

L10 ANSWER 14 OF 36 USPATFULL
TI Cold tolerances in plants

L10 ANSWER 15 OF 36 USPATFULL
TI Cold tolerances in plants

L10 ANSWER 16 OF 36 MEDLINE
TI **Cloning** and characterization of a thermal **hysteresis** (**antifreeze**) **protein** with DNA-binding activity from winter bittersweet nightshade, Solanum dulcamara.

L10 ANSWER 17 OF 36 MEDLINE
TI Structure-function relationships in spruce budworm **antifreeze protein** revealed by isoform diversity.

L10 ANSWER 18 OF 36 MEDLINE
TI Beta-helix structure and ice-binding properties of a hyperactive **antifreeze protein** from an **insect**.

L10 ANSWER 19 OF 36 MEDLINE
TI Disulfide bond mapping and structural characterization of spruce budworm **antifreeze protein**.

L10 ANSWER 20 OF 36 MEDLINE
TI Enhancement of **insect antifreeze protein** activity by solutes of low molecular mass.

L10 ANSWER 21 OF 36 MEDLINE
TI The **antifreeze** potential of the spruce budworm thermal **hysteresis protein**.

L10 ANSWER 22 OF 36 MEDLINE
TI Plant thermal **hysteresis proteins**.

L10 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2002 ACS
TI Expression of **insect**, Dendroides canadensis, **antifreeze proteins** in Arabidopsis and **cloning** of a thermal **hysteresis** (**antifreeze**) **protein** gene in Solanum dulcamara

L10 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2002 ACS
TI .beta.-helix structure and ice-binding properties of a hyperactive **antifreeze protein** from an **insect**

L10 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2002 ACS
TI Tracking the profile of a specific **antifreeze protein** and its contribution to the thermal **hysteresis** activity in cold hardy **insects**

L10 ANSWER 26 OF 36 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
TI Correlative influence of gut appearance, water content and thermal **hysteresis** on whole body supercooling point of adult bark beetles, Ips acuminatus Gy11.

L10 ANSWER 27 OF 36 SCISEARCH COPYRIGHT 2002 ISI (R)
TI Folding and structural characterization of highly disulfide-bonded beetle **antifreeze protein** produced in bacteria

L10 ANSWER 28 OF 36 SCISEARCH COPYRIGHT 2002 ISI (R)
TI **Isolation** and characterization of cDNA **clones** encoding **antifreeze proteins** of the pyrochroid beetle Dendroides canadensis

L10 ANSWER 29 OF 36 SCISEARCH COPYRIGHT 2002 ISI (R)
TI Evolution of the diverse **antifreeze proteins**

L10 ANSWER 30 OF 36 SCISEARCH COPYRIGHT 2002 ISI (R)
TI Maintenance of the supercooled state in overwintering pyrochroid beetle larvae, Dendroides canadensis: Role of hemolymph ice nucleators and **antifreeze proteins**

L10 ANSWER 31 OF 36 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI **Isolation** and characterization of **antifreeze protein** from sunn pest (Eurygaster integriceps Put.

L10 ANSWER 32 OF 36 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Increased gene dosage augments **antifreeze protein** levels in transgenic Drosophila melanogaster.

L10 ANSWER 33 OF 36 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Expression of a cystine-rich fish **antifreeze** in transgenic Drosophila melanogaster.

L10 ANSWER 34 OF 36 CABA COPYRIGHT 2002 CABI
TI **Isolation** and characterization of freezing-point depressing peptides from larvae of Tenebrio molitor.

L10 ANSWER 35 OF 36 AGRICOLA
TI Maintenance of the supercooled state in the gut fluid of overwintering pyrochroid beetle larvae, Dendroides canadensis: role of ice nucleators and **antifreeze proteins**.

L10 ANSWER 36 OF 36 FSTA COPYRIGHT 2002 IFIS
TI The **antifreeze** potential of the spruce budworm thermal **hysteresis protein**.

=> d ti l9 1-88

L9 ANSWER 1 OF 88 USPATFULL DUPLICATE 1
TI **Tenebrio antifreeze proteins**

L9 ANSWER 2 OF 88 USPATFULL DUPLICATE 2
TI **Tenebrio antifreeze proteins**

L9 ANSWER 3 OF 88 USPATFULL
TI Nucleic acid sequences encoding type III **tenebrio antifreeze proteins** and method for assaying activity

L9 ANSWER 4 OF 88 USPATFULL
TI Nucleic acid sequences encoding type III **tenebrio antifreeze proteins** and method for assaying activity

L9 ANSWER 5 OF 88 USPATFULL
TI Spruce budworm **antifreeze proteins**, genes and method of using same

L9 ANSWER 6 OF 88 Elsevier BIOBASE COPYRIGHT 2002 Elsevier Science B.V.
TI Identification of the ice-binding face of **antifreeze protein** from **Tenebrio** molitor

L9 ANSWER 7 OF 88 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
TI **Cloning** of **Tenebrio** molitor **antifreeze protein** cDNAs, their properties and **recombinant** expression, and application as recrystn. inhibition factors thereof

L9 ANSWER 8 OF 88 LIFESCI COPYRIGHT 2002 CSA
TI beta -Helix structure and ice-binding properties of a hyperactive **antifreeze protein** from an insect

L9 ANSWER 9 OF 88 MEDLINE DUPLICATE 4
TI Folding and structural characterization of highly disulfide-bonded beetle **antifreeze protein** produced in bacteria.

L9 ANSWER 10 OF 88 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5
TI Properties and uses of **Tenebrio** molitor thermal **hysteresis** (**antifreeze**) **proteins** (THP)

L9 ANSWER 11 OF 88 USPATFULL
TI Spruce budworm **antifreeze proteins**, genes and methods of using same

L9 ANSWER 12 OF 88 USPATFULL
TI Prevention of leakage and phase separation during thermotropic phase transition in liposomes and biological cells

L9 ANSWER 13 OF 88 MEDLINE DUPLICATE 6
TI A complex family of highly heterogeneous and internally repetitive hyperactive **antifreeze proteins** from the beetle **Tenebrio** molitor.

L9 ANSWER 14 OF 88 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Repeating structure and isoform heterogeneity of a hyperactive **antifreeze protein** from beetle, **Tenebrio** molitor.

L9 ANSWER 15 OF 88 USPATFULL
TI Tissue destruction in cryosurgery by use of thermal **hysteresis**

L9 ANSWER 16 OF 88 USPATFULL
TI Transgenic plants having a nucleic acid sequence encoding a dendroides **antifreeze protein**

L9 ANSWER 17 OF 88 USPATFULL
TI Nucleic acid sequences encoding dendroides **antifreeze proteins**

L9 ANSWER 18 OF 88 CAPLUS COPYRIGHT 2002 ACS
TI Hyperactive **antifreeze protein** from beetles

L9 ANSWER 19 OF 88 SCISEARCH COPYRIGHT 2002 ISI (R)
TI TRACKING THE PROFILE OF A SPECIFIC **ANTIFREEZE PROTEIN** AND ITS CONTRIBUTION TO THE THERMAL **HYSTERESIS** ACTIVITY IN COLD HARDY INSECTS

L9 ANSWER 20 OF 88 USPATFULL
TI Interaction of thermal **hysteresis proteins** with cells and cell membranes and associated applications

L9 ANSWER 21 OF 88 SCISEARCH COPYRIGHT 2002 ISI (R)
TI EXTRACTION AND **ISOLATION** OF **ANTIFREEZE** **PROTEINS** FROM WINTER RYE (SECALE-CEREALE L) LEAVES

L9 ANSWER 22 OF 88 MEDLINE
TI Purification, composition, and physical properties of a thermal **hysteresis** "**antifreeze**" **protein** from larvae of the beetle, **Tenebrio** molitor.

L9 ANSWER 23 OF 88 CAPLUS COPYRIGHT 2002 ACS
TI Purification and composition of a thermal **hysteresis** producing **protein** from the milkweed bug, Oncopeltus fasciatus

L9 ANSWER 24 OF 88 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 7
TI **Isolation** and characterization of freezing-point-depressing peptides from larvae of **Tenebrio** molitor

L9 ANSWER 25 OF 88 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 8
TI Composition of a **protein** **antifreeze** from larvae of the beetle, **Tenebrio** molitor

L9 ANSWER 26 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 27 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 28 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 29 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 30 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 31 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 32 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis** **protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 33 OF 88 DGENE (C) 2002 THOMSON DERWENT

TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 34 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 35 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 36 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 37 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 38 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 39 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 40 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 41 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 42 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 43 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 44 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 45 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 46 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 47 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 48 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 49 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 50 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 51 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 52 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 53 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 54 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 55 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 56 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 57 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 58 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 59 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 60 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 61 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 62 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 63 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 64 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 65 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing

antifreeze protection to improve the quality of food -

L9 ANSWER 66 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 67 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 68 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 69 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 70 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 71 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 72 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 73 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 74 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 75 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 76 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New cDNA polynucleotide encoding a thermal **hysteresis protein** which is a Type III anti-freeze **protein** derived

from the **Tenebrionoidea** Superfamily, useful for providing **antifreeze** protection to improve the quality of food -

L9 ANSWER 77 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 78 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 79 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 80 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 81 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 82 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 83 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 84 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 85 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 86 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of **Tenebrio** molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 87 OF 88 DGENE (C) 2002 THOMSON DERWENT
TI New nucleic acid encoding **antifreeze proteins** of

Tenebrio molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

L9 ANSWER 88 OF 88 FROSTI COPYRIGHT 2002 LFRA
TI **Tenebrio antifreeze proteins.**

=> d his

(FILE 'HOME' ENTERED AT 17:20:20 ON 25 NOV 2002)

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 17:20:33 ON 25 NOV 2002

SEA HYSTERE? AND (PROTEI? OR POLYPEPTID?)

29	FILE ADISALERTS
14	FILE ADISINSIGHT
6	FILE ADISNEWS
81	FILE AGRICOLA
27	FILE AQUASCI
29	FILE BIOBUSINESS
1	FILE BIOCOMMERCE
803	FILE BIOSIS
23	FILE BIOTECHABS
23	FILE BIOTECHDS
342	FILE BIOTECHNO
177	FILE CABA
291	FILE CANCERLIT
930	FILE CAPLUS
14	FILE CEABA-VTB
4	FILE CEN
3	FILE CIN
6	FILE CONFSCI
8	FILE DDFB
137	FILE DDFU
160	FILE DGENE
8	FILE DRUGB
338	FILE DRUGU
1	FILE DRUGUPDATES
7	FILE EMBAL
905	FILE EMBASE
331	FILE ESBIOBASE
19	FILE FEDRIP
32	FILE FROSTI
67	FILE FSTA
23	FILE GENBANK
28	FILE IFIPAT
265	FILE JICST-EPLUS
1	FILE KOSMET
124	FILE LIFESCI
957	FILE MEDLINE
2	FILE NIOSHTIC
4	FILE NTIS
6	FILE OCEAN
350	FILE PASCAL
1	FILE PHARMAML
6	FILE PHIN
40	FILE PROMT
824	FILE SCISEARCH
174	FILE TOXCENTER
963	FILE USPATFULL

```
                16   FILE USPAT2
                33   FILE VETU
                28   FILE WPIDS
                28   FILE WPINDEX
                 6   FILE IPA
                 1   FILE NAPRALERT
                38   FILE NLDB
L1                    QUE HYSTERE? AND (PROTEI? OR POLYPEPTID?)
                      ---------

      FILE 'USPATFULL, MEDLINE, CAPLUS, EMBASE, SCISEARCH, BIOSIS, PASCAL,
      BIOTECHNO, DRUGU, ESBIOBASE, CANCERLIT, JICST-EPLUS, CABA, TOXCENTER,
      DGENE, LIFESCI, AGRICOLA, FSTA, PROMT, NLDB, VETU, FROSTI, ADISALERTS,
      BIOBUSINESS, IFIPAT, WPIDS' ENTERED AT 17:22:50 ON 25 NOV 2002
L2          8339 S HYSTERE? AND (PROTEI? OR POLYPEPTID?)
L3          1013 S L2 AND ANTIFREE?
L4           192 S L3 AND TENEB?
L5           322 S L3 AND INSEC?
L6           141 DUP REM L5 (181 DUPLICATES REMOVED)
L7           111 S L4 AND (RECOMBIN? OR ISOLAT? OR CLON?)
L8            55 S L6 AND (RECOMBINA? OR ISOLAT? OR CLON?)
L9            88 DUP REM L7 (23 DUPLICATES REMOVED)
L10           36 S L8 NOT L9

=> log h
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    47.40      49.73

 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 17:35:39 ON 25 NOV 2002
```

WEST

Help | Logout | Interrupt

Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences | Cases

Search Results -

Terms	Documents
L1 and hysteres$3	49

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L2

Refine Search

Recall Text | Clear

Search History

DATE: Monday, November 25, 2002 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR			
L2	L1 and hysteres$3	49	L2
L1	antifree$3 same (protei$3 or polypeptid$3)	200	L1

END OF SEARCH HISTORY

WEST

Generate Collection | Print

Search Results - Record(s) 1 through 10 of 49 returned.

1. Document ID: US 20020173024 A1

L2: Entry 1 of 49 File: PGPB Nov 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020173024
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020173024 A1

TITLE: Nucleic acid sequences encoding type III tenebrio antifreeze proteins and method for assaying activity

PUBLICATION-DATE: November 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Horwath, Kathleen L.	Endwell	NY	US	
Easton, Christopher M.	Ithaca	NY	US	

US-CL-CURRENT: 435/199; 435/252.3, 435/320.1, 435/6, 435/69.1, 536/23.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

2. Document ID: US 20020172951 A1

L2: Entry 2 of 49 File: PGPB Nov 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020172951
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020172951 A1

TITLE: Nucleic acid sequences encoding type III tenebrio antifreeze proteins and method for assaying activity

PUBLICATION-DATE: November 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Horwath, Kathleen L.	Endwell	NY	US	
Meyers, Kevin L.	Trumansburg	NY	US	

US-CL-CURRENT: 435/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

3. Document ID: US 20020165383 A1

L2: Entry 3 of 49 File: PGPB Nov 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020165383
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020165383 A1

TITLE: Tenebrio antifreeze proteins

PUBLICATION-DATE: November 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Graham, Laurie A.	Kingston		CA	
Liou, Yih-Cherng	Kingston		CA	
Walker, Virginia K.	Sydenham		CA	
Davies, Peter L.	Kingston		CA	

US-CL-CURRENT: 536/23.5; 435/320.1, 435/325, 435/69.1, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw Desc
Image

4. Document ID: US 20020137121 A1

L2: Entry 4 of 49 File: PGPB Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020137121
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020137121 A1

TITLE: Cell viability detection using electrical measurements

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rubinsky, Boris	Albany	CA	US	
Huang, Yong	Albany	CA	US	

US-CL-CURRENT: 435/29; 435/173.1, 435/4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw Desc
Image

5. Document ID: US 20020103222 A1

L2: Entry 5 of 49 File: PGPB Aug 1, 2002

PGPUB-DOCUMENT-NUMBER: 20020103222
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020103222 A1

TITLE: Extending tissue preservation

PUBLICATION-DATE: August 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Mangat, Harpal S.	Tampa	FL	US	

US-CL-CURRENT: 514/307; 435/1.1, 435/2, 514/315, 514/579, 514/759

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

6. Document ID: US 20020063235 A1

L2: Entry 6 of 49 File: PGPB May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020063235
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020063235 A1

TITLE: Prevention of ice nucleation by polyglycerol

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Fahy, Greg	Corona	CA	US	
Wowk, Brian	Corona	CA	US	

US-CL-CURRENT: 252/70

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

7. Document ID: US 20020042131 A1

L2: Entry 7 of 49 File: PGPB Apr 11, 2002

PGPUB-DOCUMENT-NUMBER: 20020042131
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020042131 A1

TITLE: Cryopreservation method using cryoprotective composition of propanediol and a vehicle solution

PUBLICATION-DATE: April 11, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Brockbank, Kelvin G.M.	Charleston	SC	US	
Taylor, Michael J.	Mount Pleasant	SC	US	
Campbell, Lia Hanson	Mount Pleasant	SC	US	

US-CL-CURRENT: 435/374

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

8. Document ID: US 20020038470 A1

L2: Entry 8 of 49 File: PGPB Mar 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020038470
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020038470 A1

TITLE: Non-food crop plant bioreactor

PUBLICATION-DATE: March 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Brandle, Jim	London		CA	
Davies, Peter L.	Kingston		CA	
Kenward, Kimberley D.	St. Vegreville		CA	
Menassa, Rima	London		CA	
Jevnikar, Anthony M.	London		CA	
Delovitch, Terry	London		CA	

US-CL-CURRENT: 800/278; 514/12, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

9. Document ID: US 20010055809 A1

L2: Entry 9 of 49 File: PGPB Dec 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010055809
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010055809 A1

TITLE: EXTENDING TISSUE PRESERVATION

PUBLICATION-DATE: December 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
MANGAT, HARPAL S.	TAMPA	FL	US	

US-CL-CURRENT: 435/374; 514/100

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

10. Document ID: US 20010048962 A1

L2: Entry 10 of 49 File: PGPB Dec 6, 2001

PGPUB-DOCUMENT-NUMBER: 20010048962
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010048962 A1

TITLE: FROZEN FOOD PRODUCT

PUBLICATION-DATE: December 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
ANTHONY FENN, RICHARD	COLWORTH		GB	
NEEDHAM, DAVID	COLWORTH		GB	
SMALLWOOD, KEITH	COLWORTH		GB	

US-CL-CURRENT: 426/565; 426/100, 426/101, 426/656, 426/660

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Image | KWIC | Draw Desc

Generate Collection | Print

Terms	Documents
L1 and hysteres$3	49

Display Format: - Change Format

Previous Page Next Page

WEST

Generate Collection | Print

Search Results - Record(s) 11 through 20 of 49 returned.

11. Document ID: US 6429293 B1

L2: Entry 11 of 49 File: USPT Aug 6, 2002

US-PAT-NO: 6429293
DOCUMENT-IDENTIFIER: US 6429293 B1

TITLE: Sculpin-type antifreeze polypeptides and nucleic acids

DATE-ISSUED: August 6, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hew; Choy L.	Thornhill	CA		

US-CL-CURRENT: 530/350; 426/321, 530/300, 530/327

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

12. Document ID: US 6395467 B1

L2: Entry 12 of 49 File: USPT May 28, 2002

US-PAT-NO: 6395467
DOCUMENT-IDENTIFIER: US 6395467 B1

TITLE: Cryoprotectant solution containing dimethyl sulfoxide, an amide and ethylene glycol

DATE-ISSUED: May 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fahy; Gregory M.	Corona	CA	92879	
Wowk; Brian	Corona	CA	92879	

US-CL-CURRENT: 435/1.3; 435/1.1, 435/260

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

13. Document ID: US 6392024 B1

L2: Entry 13 of 49 File: USPT May 21, 2002

US-PAT-NO: 6392024
DOCUMENT-IDENTIFIER: US 6392024 B1

TITLE: Tenebrio antifreeze proteins

DATE-ISSUED: May 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Graham; Laurie A.	Kingston			CA
Liou; Yih-Cherng	Kingston			CA
Walker; Virginia K.	Sydenham			CA
Davies; Peter L.	Kingston			CA

US-CL-CURRENT: 536/23.5; 435/252.3, 435/254.11, 435/254.21, 435/254.22, 435/320.1, 435/6, 536/23.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

14. Document ID: US 6348569 B1

L2: Entry 14 of 49 File: USPT Feb 19, 2002

US-PAT-NO: 6348569
DOCUMENT-IDENTIFIER: US 6348569 B1

TITLE: Spruce budworm antifreeze proteins, genes and method of using same

DATE-ISSUED: February 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walker; Virginia K.	Sydenham			CA
Davies; Peter L.	Kingston			CA
Rahavard; Mitra	Kingston			CA
Tyshenko; Michael G.	Kingston			CA

US-CL-CURRENT: 530/300; 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

15. Document ID: US 6312733 B1

L2: Entry 15 of 49 File: USPT Nov 6, 2001

US-PAT-NO: 6312733
DOCUMENT-IDENTIFIER: US 6312733 B1

TITLE: Ice crystal growth inhibiting agents from Zoarces viviparus

DATE-ISSUED: November 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jann; Alfred	Publier			FR
Lundheim; Rolv	Trondheim			NO

US-CL-CURRENT: 424/531; 426/657, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

16. Document ID: US 6307020 B1

L2: Entry 16 of 49 File: USPT Oct 23, 2001

US-PAT-NO: 6307020
DOCUMENT-IDENTIFIER: US 6307020 B1

TITLE: Intracellular antifreeze polypeptides and nucleic acids

DATE-ISSUED: October 23, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hew; Choy	Thornhill			CA
Gong; Zhiyuan	Toronto			CA

US-CL-CURRENT: 530/350; 435/252.3, 435/320.1, 435/419, 435/68.1, 435/69.1, 435/69.7, 435/91.1, 530/300, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

17. Document ID: US 6303388 B1

L2: Entry 17 of 49 File: USPT Oct 16, 2001

US-PAT-NO: 6303388
DOCUMENT-IDENTIFIER: US 6303388 B1

TITLE: Process for preparing novel ice-controlling molecules

DATE-ISSUED: October 16, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fahy; Gregory M.	Gaithersburg	MD		

US-CL-CURRENT: 436/518; 252/70, 424/184.1, 435/7.1, 435/7.8

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

18. Document ID: US 6174550 B1

L2: Entry 18 of 49 File: USPT Jan 16, 2001

US-PAT-NO: 6174550
DOCUMENT-IDENTIFIER: US 6174550 B1

TITLE: Antifreeze polypeptide-expressing microorganisms useful in fermentation and frozen storage of foods

DATE-ISSUED: January 16, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fletcher; Garth L.	St. John's			CA
Hew; Choy L.	Thornhill			CA
Joshi; Shashikant B.	Toronto			CA
Wu; Yaling	St. John's			CA

US-CL-CURRENT: 426/34; 426/36, 426/42, 426/580, 426/583, 435/252.9, 435/253.4, 435/41, 435/71.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

19. Document ID: US 6162789 A

L2: Entry 19 of 49 File: USPT Dec 19, 2000

US-PAT-NO: 6162789
DOCUMENT-IDENTIFIER: US 6162789 A

TITLE: Frozen food product

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lillford; Peter John	Colworth			GB
McArthur; Andrew John	Colworth			GB
Sidebottom; Christopher Michael	Colworth			GB
Wilding; Peter	Colworth			GB

US-CL-CURRENT: 514/13; 426/249, 514/15, 530/326, 530/328, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

20. Document ID: US 6156880 A

L2: Entry 20 of 49 File: USPT Dec 5, 2000

US-PAT-NO: 6156880

DOCUMENT-IDENTIFIER: US 6156880 A

TITLE: Frozen food product

DATE-ISSUED: December 5, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lillford; Peter John	Colworth			GB
McArthur; Andrew John	Colworth			GB
Sidebottom; Christopher Michael	Colworth			GB
Wilding; Peter	Colworth			GB

US-CL-CURRENT: 530/350; 426/524, 426/656, 426/660

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw. Desc | Image

Generate Collection | Print

Terms	Documents
L1 and hysteres$3	49

Display Format: - Change Format

Previous Page Next Page

WEST

Generate Collection | Print

Parent case

L2: Entry 13 of 49 File: USPT May 21, 2002

US-PAT-NO: 6392024
DOCUMENT-IDENTIFIER: US 6392024 B1

TITLE: Tenebrio antifreeze proteins

DATE-ISSUED: May 21, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Graham; Laurie A.	Kingston			CA
Liou; Yih-Cherng	Kingston			CA
Walker; Virginia K.	Sydenham			CA
Davies; Peter L.	Kingston			CA

US-CL-CURRENT: 536/23.5; 435/252.3, 435/254.11, 435/254.21, 435/254.22, 435/320.1, 435/6, 536/23.1

CLAIMS:

What is claimed is:

1. An isolated nucleic acid encoding an antifreeze protein, said protein defined as follows:

(i) having a calculated molecular weight of between 7 and 13 kDa;

(ii) having a thermal hysteresis activity greater than 1.5.degree. C. at about 1 mg/mL;

(iii) having a nucleic acid subsequence which encodes the N-terminal motif set forth in Seq. ID No. 3;

(iv) specifically binding to polyclonal antibodies raised against antifreeze protein selected from the group consisting of YL-1, YL-2, YL-3 or YL-4: and,

(v) having at least about 70% amino acid sequence identity to an antifreeze protein selected from the group consisting of YL-1, YL-2, YL-3 or YL-4.

2. The isolated nucleic acid of claim 1, wherein the calculated molecular weight of the encoded protein is between about 8 and 12 kDa.

3. The isolated nucleic acid of claim 1, wherein the thermal hysteresis activity is greater than 2.degree. C. at 1 mg/mL.

4. The isolated nucleic acid of claim 1, wherein the encoded protein includes a subsequence of amino acids corresponding to Seq ID No: 4.

5. The isolated nucleic acid of claim 1 selected from the group consisting of: YL-1 (SEQ ID NO. 10), YL-2 (SEQ ID NO. 12), YL-3 (SEQ ID NO. 16) and YL-4 (SEQ ID NO. 14).

6. An isolated nucleic acid which specifically hybridizes to SEQ ID NO: 2 under

stringent wash conditions of 0.2.times.SSc at 65.degree. C. for 15 minutes and encodes an antifreeze protein having a thermal hysteresis activity greater than about 1.5.degree. C. at about 1 mg/mL.

7. An isolated nucleic acid which specifically hybridizes under stringent wash conditions to the subsequence of SEQ ID NO:12 from nucleotides 105 to 359, wherein the nucleic acid encodes a thermal hysteresis protein that lacks a signal sequence.

8. The isolated nucleic acid of claim 7, wherein the nucleic acid specifically hybridizes under highly stringent wash conditions.

9. The isolated nucleic acid of claim 7 which encodes the 12 amino acid motif of SEQ ID NO:1.

10. An expression vector comprising the isolated nucleic acid of claim 1 operably linked to a promoter.

11. The expression vector of claim 10, wherein the promoter is heterologous.

12. The expression vector of claim 11, wherein the promoter is constitutive.

13. A cell into which, or into an ancestor of which, the isolated nucleic acid of claim 1 has been introduced.

14. The cell of claim 13, wherein the isolated nucleic acid sequence is translated into an antifreeze protein which is expressed externally from the cell.

15. The cell of claim 13, wherein said cell is a fungus.

16. The cell of claim 15, wherein the fungus is a yeast.

17. The cell of claim 16, wherein the yeast is selected from the group consisting of Torulopsis holmil, Saccharomyces fragilis, Saccharomyces cerevisiae, Saccharomyces lactis, and Candida pseudotropicalis.

18. The cell of claim 13, wherein the cell is a bacterium.

19. The cell of claim 18, wherein the bacterium is selected from the group consisting of Streptococcus cremoris, Streptococcus lactis, Streptococcus thermophilus, Leuconostoc citrovorum, Leuconostoc mesenteroides, Lactobacillus acidophilus, Lactobacillus lactis, Bifidobacterium bifidum, Bifidobacterium breve, and Bifidobacterium longum.

WEST

Generate Collection | Print

Search Results - Record(s) 21 through 30 of 49 returned.

☐ 21. Document ID: US 6096867 A

L2: Entry 21 of 49 File: USPT Aug 1, 2000

US-PAT-NO: 6096867
DOCUMENT-IDENTIFIER: US 6096867 A

TITLE: Frozen food product

DATE-ISSUED: August 1, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Byass; Louise Jane	Heslington			GB
Darling; Donald Frank	Colworth			GB
Doucet; Charlotte Juliette	Heslington			GB
Fenn; Richard Anthony	Colworth			GB
Lillford; Peter John	Colworth			GB
McArthur; Andrew John	Colworth			GB
Needham; David	Colworth			GB
Sidebottom; Christopher	Colworth			GB
Smallwood; Keith	Colworth			GB
Smallwood; Margaret Felicia	Heslington			GB

US-CL-CURRENT: 530/350; 426/100, 426/101, 426/139, 426/49, 426/656, 426/660, 530/300, 530/326, 530/328

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 22. Document ID: US 6090917 A

L2: Entry 22 of 49 File: USPT Jul 18, 2000

US-PAT-NO: 6090917
DOCUMENT-IDENTIFIER: US 6090917 A

TITLE: Frozen food product

DATE-ISSUED: July 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lillford; Peter John	Colworth			GB
McArthur; Andrew John	Colworth			GB
Sidebottom; Christopher Michael	Colworth			GB

US-CL-CURRENT: 530/350; 426/100, 426/101, 426/104, 426/139, 426/565, 530/300, 530/326, 530/327, 530/328

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw. Desc | Image

23. Document ID: US 6008016 A

L2: Entry 23 of 49 File: USPT Dec 28, 1999

US-PAT-NO: 6008016
DOCUMENT-IDENTIFIER: US 6008016 A

TITLE: Spruce budworm antifreeze proteins, genes and methods of using same

DATE-ISSUED: December 28, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walker; Virginia K.	Sydenham			CA
Davies; Peter L.	Kingston			CA
Rahavard; Mitra	Kingston			CA
Tyshenko; Michael G.	Kingston			CA

US-CL-CURRENT: 435/69.1; 435/252.3, 435/252.33, 435/254.11, 435/254.2, 435/254.21, 435/320.1, 435/325, 435/410, 530/300 , 530/350, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw. Desc | Image

24. Document ID: US 5972679 A

L2: Entry 24 of 49 File: USPT Oct 26, 1999

US-PAT-NO: 5972679
DOCUMENT-IDENTIFIER: US 5972679 A

TITLE: Cold tolerances in plants

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Griffith; Marilyn	Waterloo			CA

US-CL-CURRENT: 435/204; 435/205, 435/209, 530/350, 530/370, 530/372, 530/379

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw. Desc | Image

25. Document ID: US 5932697 A

L2: Entry 25 of 49 File: USPT Aug 3, 1999

US-PAT-NO: 5932697
DOCUMENT-IDENTIFIER: US 5932697 A

TITLE: Synthetic antifreeze peptide

DATE-ISSUED: August 3, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Caceci; Thomas	Blacksburg	VA		
Toth; Thomas E.	Blacksburg	VA		
Szumanski; Maria B.	Roanoke	VA		

US-CL-CURRENT: 530/350; 435/252.33, 435/69.1, 530/300, 530/857

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw Desc
Image

26. Document ID: US 5928877 A

L2: Entry 26 of 49 File: USPT Jul 27, 1999

US-PAT-NO: 5928877
DOCUMENT-IDENTIFIER: US 5928877 A

TITLE: Assay for an antifreeze protein

DATE-ISSUED: July 27, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lusk; Lance	Milwaukee	WI		
Cronan; Charles L.	Shorewood	WI		

US-CL-CURRENT: 435/7.1; 435/14, 435/7.4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw Desc
Image

27. Document ID: US 5925540 A

L2: Entry 27 of 49 File: USPT Jul 20, 1999

US-PAT-NO: 5925540
DOCUMENT-IDENTIFIER: US 5925540 A

TITLE: Synthetic antifreeze peptide and synthetic gene coding for its production

DATE-ISSUED: July 20, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Caceci; Thomas	Blacksburg	VA		
Toth; Thomas E.	Blacksburg	VA		
Szumanski; Maria B. W.	Roanoke	VA		

US-CL-CURRENT: 435/69.1; 435/252.3, 435/252.33, 435/320.1, 435/440, 435/91.1, 435/91.4, 536/23.1, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 28. Document ID: US 5869092 A

L2: Entry 28 of 49 File: USPT Feb 9, 1999

US-PAT-NO: 5869092
DOCUMENT-IDENTIFIER: US 5869092 A

TITLE: Prevention of leakage and phase separation during thermotropic phase transition in liposomes and biological cells

DATE-ISSUED: February 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hays; Lisa M.	Davis	CA		
Crowe; John H.	Davis	CA		
Crowe; Lois M.	Davis	CA		
Feeney; Robert E.	Davis	CA		
Oliver; Ann E.	Davis	CA		

US-CL-CURRENT: 424/450

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 29. Document ID: US 5852172 A

L2: Entry 29 of 49 File: USPT Dec 22, 1998

US-PAT-NO: 5852172
DOCUMENT-IDENTIFIER: US 5852172 A

TITLE: Cold tolerances in plants

DATE-ISSUED: December 22, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Griffith; Marilyn	Waterloo			CA

US-CL-CURRENT: 530/379; 435/204, 435/205, 435/209, 530/360, 530/370, 530/372

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Image | KWIC | Draw Desc

30. Document ID: US 5849537 A

L2: Entry 30 of 49 File: USPT Dec 15, 1998

US-PAT-NO: 5849537
DOCUMENT-IDENTIFIER: US 5849537 A

TITLE: Method of expressing antifreeze proteins in yeast

DATE-ISSUED: December 15, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tripp; Matthew	Nashotah	WI		
Lusk; Lance	Milwaukee	WI		
Rhodes; Thomas	Cedarburg	WI		
Huige; Nick	Brookfield	WI		
Kot; Edward	Delafield	WI		
Chicoye; Etzer	Wauwatosa	WI		
Barney; Michael C.	Wauwatosa	WI		
Bower; Patricia A.	Milwaukee	WI		
Cronan; Charles L.	Shorewood	WI		

US-CL-CURRENT: 435/69.7; 435/254.21, 435/320.1, 536/23.4, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Image | KWIC | Draw Desc

Generate Collection | Print

Terms	Documents
L1 and hysteres$3	49

Display Format: - Change Format

Previous Page Next Page

WEST

Generate Collection | Print

Search Results - Record(s) 31 through 40 of 49 returned.

31. Document ID: US 5676985 A

L2: Entry 31 of 49 File: USPT Oct 14, 1997

US-PAT-NO: 5676985
DOCUMENT-IDENTIFIER: US 5676985 A

TITLE: Antifreeze polypeptide-expressing microorganisms useful in fermentation and freezing of foods

DATE-ISSUED: October 14, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fletcher; Garth L.	St. John's			CA
Hew; Choy L.	Thornhill			CA
Joshi; Shashikant B.	Toronto			CA
Wu; Yaling	St. John's			CA

US-CL-CURRENT: 426/36; 426/34, 426/42, 435/252.9, 435/253.4, 435/41, 435/71.1, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

32. Document ID: US 5654279 A

L2: Entry 32 of 49 File: USPT Aug 5, 1997

US-PAT-NO: 5654279
DOCUMENT-IDENTIFIER: US 5654279 A

TITLE: Tissue destruction in cryosurgery by use of thermal hysteresis

DATE-ISSUED: August 5, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rubinsky; Boris	Albany	CA		
Koushafar; Amir-Homayoon	Richmond	CA		

US-CL-CURRENT: 514/21; 128/DIG.27, 514/8, 606/20, 606/21

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

33. Document ID: US 5633451 A

L2: Entry 33 of 49 File: USPT May 27, 1997

US-PAT-NO: 5633451
DOCUMENT-IDENTIFIER: US 5633451 A

TITLE: Transgenic plants having a nucleic acid sequence encoding a dendroides antifreeze protein

DATE-ISSUED: May 27, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Duman; John G.	South Bend	IN		

US-CL-CURRENT: 800/295; 435/419, 435/69.1, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

34. Document ID: US 5627051 A

L2: Entry 34 of 49 File: USPT May 6, 1997

US-PAT-NO: 5627051
DOCUMENT-IDENTIFIER: US 5627051 A

TITLE: Nucleic acid sequences encoding dendroides antifreeze proteins

DATE-ISSUED: May 6, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Duman; John G.	South Bend	IN		

US-CL-CURRENT: 435/69.1; 536/23.5, 536/24.31

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

35. Document ID: US 5358931 A

L2: Entry 35 of 49 File: USPT Oct 25, 1994

US-PAT-NO: 5358931
DOCUMENT-IDENTIFIER: US 5358931 A

TITLE: Interaction of thermal hysteresis proteins with cells and cell membranes and associated applications

DATE-ISSUED: October 25, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rubinsky; Boris	Albany	CA		
Devries; Arthur L.	Urbana	IL		
Arav; Amir	Albany	CA		

US-CL-CURRENT: 514/12; 424/523, 435/1.3, 435/2, 514/2, 514/21, 514/8

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 36. Document ID: WO 9900493 A1

L2: Entry 36 of 49 File: EPAB Jan 7, 1999

PUB-NO: WO009900493A1
DOCUMENT-IDENTIFIER: WO 9900493 A1
TITLE: TENEBRIO ANTIFREEZE PROTEINS

PUBN-DATE: January 7, 1999

INVENTOR-INFORMATION:

NAME	COUNTRY
GRAHAM, LAURIE A	CA
LIOU, YIH-CHERNG	CA
WALKER, VIRGINIA K	CA
DAVIES, PETER L	CA

INT-CL (IPC): C12 N 15/12; C07 K 14/435; C07 K 16/18; A01 K 67/027; C09 K 5/00; C12 N 15/70; C12 N 1/15; C12 N 5/10; C12 N 1/21; A01 K 67/00
EUR-CL (EPC): C07K014/435

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 37. Document ID: WO 9621001 A1

L2: Entry 37 of 49 File: EPAB Jul 11, 1996

PUB-NO: WO009621001A1
DOCUMENT-IDENTIFIER: WO 9621001 A1
TITLE: STABILIZATION OF BLOOD PLATELETS AGAINST LOW TEMPERATURE ACTIVATION

PUBN-DATE: July 11, 1996

INVENTOR-INFORMATION:

NAME	COUNTRY
TABLIN, FERN	
CROWE, JOHN H	
OLIVER, ANN E	
HAYS, LISA M	
CROWE, LOIS M	
FEENEY, ROBERT E	

INT-CL (IPC): C12 N 5/00; A61 K 38/00; A61 K 38/16; C07 K 14/435
EUR-CL (EPC): A01N001/02; A61K035/14

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

38. Document ID: WO 9620695 A1

L2: Entry 38 of 49 File: EPAB Jul 11, 1996

PUB-NO: WO009620695A1
DOCUMENT-IDENTIFIER: WO 9620695 A1
TITLE: PREVENTION OF LEAKAGE DURING THERMOTROPIC PHASE TRANSITION IN LIPOSOMES AND BIOLOGICAL CELLS

PUBN-DATE: July 11, 1996

INVENTOR-INFORMATION:

NAME	COUNTRY
HAYS, LISA M	
CROWE, JOHN H	
CROWE, LOIS M	
FEENEY, ROBERT E	

INT-CL (IPC): A61 K 9/127
EUR-CL (EPC): C07K014/46; A61K009/127, C07K014/435

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

39. Document ID: US 6348569 B1

L2: Entry 39 of 49 File: DWPI Feb 19, 2002

DERWENT-ACC-NO: 2002-380753
DERWENT-WEEK: 200241
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: New class of thermal hysteresis, antifreeze proteins isolated and purified from Choristoneura species for decreasing the freezing point of aqueous solution and to protect plants from climatic freezing conditions

INVENTOR: DAVIES, P L; RAHAVARD, M ; TYSHENKO, M G ; WALKER, V K

PRIORITY-DATA: 1997US-0868594 (June 3, 1997), 1996US-0657264 (June 3, 1996), 1999US-0434323 (November 4, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6348569 B1	February 19, 2002		027	C07K014/00

INT-CL (IPC): C07 K 14/00

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

40. Document ID: WO 200194378 A1 AU 200175389 A

L2: Entry 40 of 49 File: DWPI Dec 13, 2001

DERWENT-ACC-NO: 2002-090137
DERWENT-WEEK: 200225
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: New cDNA polynucleotide encoding a thermal hysteresis protein which is a Type III anti-freeze protein derived from the Tenebrionoidea Superfamily, useful for providing antifreeze protection to improve the quality of food

INVENTOR: EASTON, C M; HORWATH, K L ; MYERS, K L

PRIORITY-DATA: 2000US-210446P (June 8, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200194378 A1	December 13, 2001	E	231	C07K001/00
AU 200175389 A	December 17, 2001		000	C07K001/00

INT-CL (IPC): C07 H 21/02; C07 K 1/00

WEST

Generate Collection | Print

Search Results - Record(s) 41 through 49 of 49 returned.

41. Document ID: WO 200000512 A2 US 6429293 B1 AU 9944941 A

L2: Entry 41 of 49 File: DWPI Jan 6, 2000

DERWENT-ACC-NO: 2000-170905
DERWENT-WEEK: 200254
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Novel antifreeze polypeptides and polynucleotides used to make cells cold resistant and to improve the palatability of cold foods and liquids

INVENTOR: HEW, C L

PRIORITY-DATA: 1999US-0344529 (June 24, 1999), 1998US-090794P (June 26, 1998), 1998US-095713P (August 7, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200000512 A2	January 6, 2000	E	061	C07K014/46
US 6429293 B1	August 6, 2002		000	A23C003/00
AU 9944941 A	January 17, 2000		000	C07K014/46

INT-CL (IPC): A01 K 67/027; A23 C 3/00; A61 K 38/00; A61 K 38/04; C07 K 1/00; C07 K 14/46; C07 K 16/18; C12 N 15/62

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Clip Img | Image

42. Document ID: US 6008016 A

L2: Entry 42 of 49 File: DWPI Dec 28, 1999

DERWENT-ACC-NO: 2000-086220
DERWENT-WEEK: 200241
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Isolated nucleic acids encoding thermal hysteresis antifreeze proteins

INVENTOR: DAVIES, P L; RAHAVARD, M ; TYSHENKO, M G ; WALKER, V K

PRIORITY-DATA: 1997US-0868594 (June 3, 1997), 1996US-0657264 (June 3, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6008016 A	December 28, 1999		027	C07H021/04

INT-CL (IPC): C07 H 21/04; C12 P 21/06

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

43. Document ID: WO 9900493 A1 AU 747466 B AU 9880970 A EP 990032 A1 JP 2002507889 W US 6392024 B1

L2: Entry 43 of 49 File: DWPI Jan 7, 1999

DERWENT-ACC-NO: 1999-095739
DERWENT-WEEK: 200244
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: New nucleic acid encoding antifreeze proteins of Tenebrio molitor - used to improve low temperature tolerance of fish, plants etc., and quality of foods or biological materials during frozen storage

INVENTOR: DAVIES, P L; GRAHAM, L A ; LIOU, Y ; WALKER, V K

PRIORITY-DATA: 1997US-0882907 (June 26, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9900493 A1	January 7, 1999	E	088	C12N015/12
AU 747466 B	May 16, 2002		000	C12N015/12
AU 9880970 A	January 19, 1999		000	C12N015/12
EP 990032 A1	April 5, 2000	E	000	C12N015/12
JP 2002507889 W	March 12, 2002		092	C12N015/09
US 6392024 B1	May 21, 2002		000	C07H021/04

INT-CL (IPC): A01 H 5/00; A01 K 67/00; A01 K 67/027; A01 K 67/033; C07 H 21/04; C07 K 14/435; C07 K 14/46; C07 K 16/18; C09 K 5/00; C09 K 5/08; C12 N 1/14; C12 N 1/15; C12 N 1/19; C12 N 1/20; C12 N 1/21; C12 N 5/10; C12 N 15/09; C12 N 15/12; C12 N 15/70; C12 Q 1/68

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

44. Document ID: WO 9746674 A1 AU 9728838 A EP 939808 A1 CN 1221450 A MX 9810175 A1 AU 726696 B KR 2000016268 A JP 2001505404 W

L2: Entry 44 of 49 File: DWPI Dec 11, 1997

DERWENT-ACC-NO: 1998-042182
DERWENT-WEEK: 200241
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Spruce budworm antifreeze protein - useful to lower freezing point of aqueous solutions in biological and non-organic systems

INVENTOR: DAVIES, P L; RAHAVARD, M ; TYSHENKO, M G ; WALKER, V K

PRIORITY-DATA: 1996US-0657264 (June 3, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9746674 A1	December 11, 1997	E	073	C12N015/12
AU 9728838 A	January 5, 1998		000	C12N015/12
EP 939808 A1	September 8, 1999	E	000	C12N015/12
CN 1221450 A	June 30, 1999		000	C12N015/12
MX 9810175 A1	June 1, 1999		000	C12N015/12
AU 726696 B	November 16, 2000		000	C12N015/12
KR 2000016268 A	March 25, 2000		000	C12N015/12
JP 2001505404 W	April 24, 2001		075	C12N015/09

INT-CL (IPC): A01 H 5/00; A01 K 67/027; A01 N 1/02; C07 K 14/435; C07 K 16/18; C09 K 5/00; C12 N 1/15; C12 N 1/19; C12 N 1/21; C12 N 1:19; C12 N 15/09; C12 N 15/12; C12 N 1/19; C12 R 1:72; C12 R 1:85; C12 R 1:865; C12 R 1:87; C12 R 1:88; C12 N 1/21; C12 R 1:01; C12 R 1:19; C12 R 1:225; C12 R 1:23; C12 R 1:46

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Clip Img | Image

☐ 45. Document ID: US 5654279 A IL 125981 A WO 9736547 A1 AU 9725517 A CN 1214624 A AU 709249 B EP 959781 A1 JP 2000507864 W KR 2000005113 A

L2: Entry 45 of 49 File: DWPI Aug 5, 1997

DERWENT-ACC-NO: 1997-401886
DERWENT-WEEK: 200230
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Destruction of undesirable tissue containing living cells, e.g., tumours - by freezing tissue which has been perfused with solution containing thermal hysteresis protein, e.g., antifreeze glyco-protein or polypeptide

INVENTOR: KOUSHAFAR, A; RUBINSKY, B

PRIORITY-DATA: 1996US-0625074 (March 29, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5654279 A	August 5, 1997		007	A61K038/02
IL 125981 A	February 10, 2002		000	A01N001/00
WO 9736547 A1	October 9, 1997	E	021	A61B017/36
AU 9725517 A	October 22, 1997		000	A61B017/36
CN 1214624 A	April 21, 1999		000	A61B017/36
AU 709249 B	August 26, 1999		000	A61B017/36
EP 959781 A1	December 1, 1999	E	000	A61B017/36
JP 2000507864 W	June 27, 2000		030	A61B018/02
KR 2000005113 A	January 25, 2000		000	A61B017/36

INT-CL (IPC): A01 N 1/00; A61 B 17/36; A61 B 18/02; A61 K 38/00; A61 K 38/02; A61 K 38/17; A61 P 9/00; A61 P 27/02; A61 P 35/00; A61 P 43/00; C07 K 14/435

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

46. Document ID: WO 9640973 A1 US 5633451 A AU 9659819 A US 5627051 A

L2: Entry 46 of 49 File: DWPI Dec 19, 1996

DERWENT-ACC-NO: 1997-052352
DERWENT-WEEK: 199727
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: DNA encoding Dendroides sp. thermal hysteresis protein - produces protein having antifreeze properties, useful to protect plant cells, seeds or plants from frost damage

INVENTOR: DUMAN, J G

PRIORITY-DATA: 1995US-0485359 (June 7, 1995), 1995US-0569594 (December 8, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9640973 A1	December 19, 1996	E	046	C12P021/02
US 5633451 A	May 27, 1997		016	A01H001/00
AU 9659819 A	December 30, 1996		000	C12P021/02
US 5627051 A	May 6, 1997		017	C12P021/02

INT-CL (IPC): A01 G 13/00; A01 H 1/00; A01 H 1/06; A01 H 5/10; C07 H 21/04; C12 N 5/04; C12 N 5/14; C12 N 15/82; C12 P 21/02

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

47. Document ID: WO 9621001 A1 JP 2001513069 W AU 9646415 A EP 871706 A1 AU 696094 B CN 1220696 A

L2: Entry 47 of 49 File: DWPI Jul 11, 1996

DERWENT-ACC-NO: 1996-333977
DERWENT-WEEK: 200156
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Reducing spontaneous activation of blood platelets stored at low temp. - by treatment with thermal hysteresis protein, partic. derived from polar fish

INVENTOR: CROWE, J H; CROWE, L M ; FEENEY, R E ; HAYS, L M ; OLIVER, A E ; TABLIN, F

PRIORITY-DATA: 1995US-0368941 (January 5, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9621001 A1	July 11, 1996	E	029	C12N005/00
JP 2001513069 W	August 28, 2001		029	A61K035/14
AU 9646415 A	July 24, 1996		000	C12N005/00
EP 871706 A1	October 21, 1998	E	000	C12N005/00
AU 696094 B	September 3, 1998		000	C12N005/00
CN 1220696 A	June 23, 1999		000	C12N005/00

INT-CL (IPC): A01 N 1/00; A61 K 35/14; A61 K 38/00; A61 K 38/16; A61 M 1/36; C07 K 14/435; C07 K 14/46; C12 N 5/00; C12 N 5/06

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Clip Img | Image

48. Document ID: WO 9614571 A1 AU 9641463 A

L2: Entry 48 of 49 File: DWPI May 17, 1996

DERWENT-ACC-NO: 1996-251881
DERWENT-WEEK: 199639
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Thermal gradient osmometer for detecting e.g. proteins with antifreeze and thermal hysteresis effects - has sample maintained in temp. gradient zone between two zones at different fixed temp., providing accurate measurements on small samples

INVENTOR: RUBINSKY, B

PRIORITY-DATA: 1994US-0335916 (November 8, 1994)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9614571 A1	May 17, 1996	E	060	G01N025/04
AU 9641463 A	May 31, 1996		000	G01N025/04

INT-CL (IPC): C07 K 1/00; G01 N 25/04; G01 N 25/06

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

49. Document ID: WO 9212722 A1 AU 9215670 A

L2: Entry 49 of 49 File: DWPI Aug 6, 1992

DERWENT-ACC-NO: 1992-284413
DERWENT-WEEK: 199234
COPYRIGHT 2002 DERWENT INFORMATION LTD
TITLE: Compsn. contg. thermal hysteresis protein - used to protect and preserve biological materials in non-physiological temps. and conditions

INVENTOR: DEVRIES, A L; RUBINSKY, B

PRIORITY-DATA: 1991WO-US00351 (January 17, 1991)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9212722 A1	August 6, 1992	E	126	A61K037/00
AU 9215670 A	August 27, 1992		000	A61K037/00

INT-CL (IPC): A61K 37/00

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image
